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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,115	06/27/2001	Geoffrey Huang	CISCP204	7433
22434	7590	07/26/2006	EXAMINER	
BEYER WEAVER & THOMAS, LLP			CERVETTI, DAVID GARCIA	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
			2136	

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/894,115

Applicant(s)

HUANG ET AL.

Examiner

David G. Cervetti

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/21/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's arguments filed February 21 and May 15 2006, have been fully considered but they are not persuasive.
2. Claims 1-52 are pending and have been examined.

Response to Amendment

3. Upon further review of Maughan et al. (NPL "Internet Security Association and Key Management Protocol (ISAKMP)", hereinafter "Maughan"), Examiner respectfully submits that: the use of "selected from a group including" is open ended and thus is not limited to the two members listed in the amended independent claims, but allows for the inclusion of all the payloads defined by Maughan; and the "delete payload" and "security association payload" as defined by Maughan teach including reason information (the payloads include a domain of interpretation and situation fields which are used to provide more information – reason – regarding the negotiation taking place) (Maughan, sections 2.1 and Appendix B). Implementing the teachings of Maughan in other payload types or combining what Maughan expressly discloses using 1 or more payloads into 1 payload is not persuasive since combining was conventional and well known at the time the invention was made.

Claim Objections

4. Claims 15 objected to because of the following informalities: "the program ... is formatted", perhaps "wherein the first control message is formatted in accordance" as it is recited in claim 16 was intended. Examiner has interpreted claim 15 to recite "wherein

the first control message is formatted in accordance with an Internet Key Exchange protocol" Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 2-3, 8-9, 15-16, 20-21, 27-28, 35-36, 41-42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The IKE and Ipsec protocols do not provide a delete payload or a security association payload, how could then control messages be formatted according to these protocols?

Claim Rejections - 35 USC § 102

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. **Claims 1, 3-7, 9-14, 16-19, 21-26, 28-34, 36-40, and 42-52, are rejected under 35 U.S.C. 102(b) as being anticipated by Maughan et al. (NPL "Internet Security Association and Key Management Protocol (ISAKMP)", hereinafter "Maughan").**

Regarding claim 1, Maughan teaches a method for generating control message to be transmitted from a first network device to a second network device in a data

network, the control message relating to an action to be performed at the second network device, the method comprising:

- determining a first control message to be generated, wherein the first control message corresponds to a security protocol control message (page 1, 4-22);
- identifying reason information relating to at least one reason for generating the first control message (pages 40-44); and
- generating the first control message, wherein the first control message includes explicit reason information relating to the identified at least one reason for generating the control message (pages 40-56);
- wherein the first control message includes a first payload selected from a group including: a security association payload and a delete payload;
- wherein the first payload includes the reason information (sections 2.1 and Appendix B).

Regarding claim 7, Maughan teaches a method for communicating between nodes in a data network, the method comprising:

- receiving a first control message from a first node, the first control message corresponding to a security protocol control message, the first control message including explicit reason information relating to at least one reason for the generation of the first control message (pages 58-65),
- the first control message including a first payload, the reason information being included in the first payload, the first payload being selected from a

group including: a security association payload and a delete payload
(sections 2.1 and Appendix B);

- identifying the reason information (pages 58-65);
- determining an appropriate response to the first control message using at least said reason information (pages 58-73); and
- implementing said appropriate response (pages 58-73).

Regarding claim 14, Maughan teaches a computer program product for generating a control message to be transmitted from a first network device to a second network device in a data network, the control message relating to an action to be performed at the second network device, the computer program product comprising:

- a computer usable medium having computer readable code embodied therein, the computer readable code comprising:
- computer code for determining a first control message to be generated, wherein the first control message corresponds to a security protocol control message (page 1, 4-22);
- computer code for identifying reason information relating to at least one reason for generating the first control message (pages 40-44); and
- computer code for generating the first control message, wherein the first control message includes explicit reason information relating to the identified at least one reason for generating the control message (pages 40-56),

- wherein the first control message includes a first payload selected from a group including: a security association payload and a delete payload;
- wherein the first payload includes the reason information (sections 2.1 and Appendix B).

Regarding claim 19, Maughan teaches a computer program product for communicating between nodes in a data network, the computer program product comprising:

- a computer usable medium having computer readable code embodied therein, the computer readable code comprising:
 - computer code for receiving a first control message from a first node, the first control message corresponding to a security protocol control message, the first control message including explicit reason information relating to at least one reason for the generation of the first control message (pages 58-65),
 - the first control message including a first payload, the first payload including the reason information, the first payload being selected from a group including: a security association payload and a delete payload (sections 2.1 and Appendix B);
 - computer code for identifying the reason information (pages 58-65);
 - computer code for determining an appropriate response to the first control message using at least said reason information (pages 58-73);
- and

- computer code for implementing said appropriate response (pages 58-73).

Regarding claim 26, Maughan teaches a system for communicating between nodes in a data network, the system comprising:

- means for receiving a first control message from a first node, the first control message corresponding to a security protocol control message, the first control message including explicit reason information relating to at least one reason for the generation of the first control message (pages 58-65);
- means for identifying the reason information (pages 58-65);
- means for determining an appropriate response to the first control message using at least said reason information (pages 58-73); and
- means for implementing said appropriate response (pages 58-73),
- wherein the first control message includes a first payload selected from a group including: a security association payload and a delete payload;
- wherein the first payload includes the reason information (sections 2.1 and Appendix B).

Regarding claim 34, Maughan teaches a system for generating a control message to be transmitted to a network device in a data network, the control message relating to an action to be performed at the network device, the system comprising:

- at least one CPU; memory; and at least one interface for communicating with the network device (pages 1, 11-18, 23-24);

- the system being configured or designed to determine a first control message to be generated, wherein the first control message corresponds to a security protocol control message (page 1, 4-22);
- the system being further configured or designed to identify reason information relating to at least one reason for generating the first control message (pages 40-44); and
- the system being further configured or designed to generate the first control message,
- wherein the first control message includes explicit reason information relating to the identified at least one reason for generating the control message (pages 40-56),
- wherein the first control message includes a first payload selected from a group including: a security association payload and a delete payload;
- wherein the first payload includes the reason information (sections 2.1 and Appendix B).

Regarding claim 40, Maughan teaches a system for communicating between nodes in a data network, the system comprising:

- at least one CPU; memory; and at least one interface for communicating with at least one network device (pages 1, 11-18, 23-24),
- the system being configured or designed to receive a first control message from a first node, the first control message corresponding to a security protocol control message, the first control message including

- explicit reason information relating to at least one reason for the generation of the first control message (pages 58-65),
- the first control message including a first payload, the first payload including the reason information, the first payload being selected from a group including: a security association payload and a delete payload, wherein the first payload includes the reason information (sections 2.1 and Appendix B).;
 - the system being further configured or designed to identify the reason information (pages 58-65);
 - the system being further configured or designed to determine an appropriate response to the first control message using at least said reason information (pages 58-73); and
 - the system being further configured or designed to implement said appropriate response (pages 58-73).

Regarding claims 3, 9, 16, 21, 28, 36, and 42, Maughan teaches wherein the first control message is formatted in accordance with an IP Security protocol (pages 1, 4-30).

Regarding claims 4, 10, 17, 22, 29, 37, and 43, Maughan teaches wherein the first control message is formatted in accordance with an Internet Security Association Key Management Protocol (pages 1-86).

Regarding claims 5, 11, 18, 23, 30, 38, and 44, Maughan teaches wherein the first control message corresponds to a control message used for modifying a security association (pages 40-54).

Regarding claims 6, 31, and 39, Maughan teaches transmitting the first control message to the second network device to thereby cause the second network device to implement an appropriate action in response to the first control message (pages 40-73).

Regarding claims 12, 24, 32, and 45, Maughan teaches implementing a first response to the first control message if the reason information includes a first reason code; and implementing a second response to the control message if the reason information includes a second reason code (pages 40-73).

Regarding claims 13, 25, and 33, Maughan teaches wherein the control message relates to an action to be performed at a network device receiving the control message (pages 58-73).

Regarding claims 46-52, Maughan teaches wherein the security association payload is adapted to facilitate negotiation of a security association between a first network node and a second network node (section 3.4, security association payload); and wherein the delete payload is adapted to facilitate deletion of a security association associated with a first network node and a second network node (section 3.15, delete payload).

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 2, 8, 15, 20, 27, 35, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maughan.

Regarding claims 2, 8, 15, 20, 27, 35, and 41, Maughan does not expressly disclose wherein the first control message corresponds to an Internet Key Exchange protocol control message. However, Maughan teaches using security protocols for secure communications between nodes in a network (pages 1, 4-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teachings of Maughan to the Internet Key Exchange. One of ordinary skill in the art would have been motivated to do so to establish and maintain secure communications (pages 1, 4-30).

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-5861. The examiner can normally be reached on Monday-Friday 7:00 am - 5:00 pm, off on Wednesday.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DGC

CHRISTOPHER REVAL
PRIMARY EXAMINER

 7/24/06